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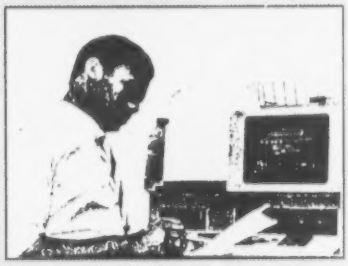

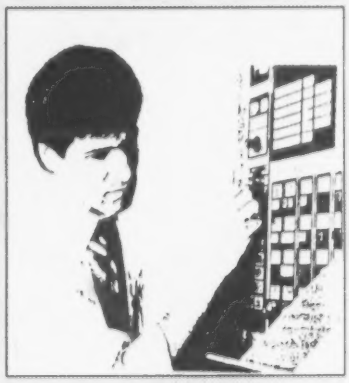

# Minnesota Labor Market Trends

Summer/Fall 1993

## In This Issue:

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A glimpse at regional labor markets and business developments ..... 6

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# Minnesota/U.S.

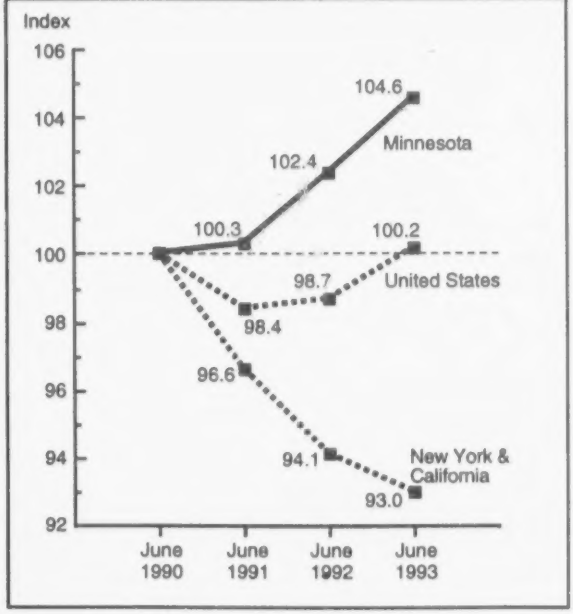
## Recession and Recovery

There are places in the U.S. where no jobs are being created despite growth in the national economy. With 45,000 net new jobs added during each of the last two 12-month spans, Minnesota is not one of those places. The worst effects of the recession and its aftermath have been felt elsewhere.

A fair analysis of recent job growth statistics must consider the entire time period since the national recession *started*. Comparisons of just the recovery are faulty because they ignore the fact that deep recessions are typically followed by fast growth simply because the economy has more lost ground to make up. This analysis uses a benchmark date of June 1990. Since then, U.S. companies shed 3.6 million jobs and added them back, so nationwide employment levels are about the same now as they were three years ago.

Figure 1

**Job Creation/Destruction**
**June 1990 to June 1993**




Minnesota's experience during that time was different than the nation's (Figure 1). Jobs continued to be created -- slowly for the first year, and at a moderate growth rate thereafter.

Just about every other state fared worse. Minnesota was one of four states that ranked in the top ten in both the **rate** of job growth (9th) and in the **number** of jobs added (3rd) during the full recession/recovery period, along with Utah, Colorado and Arkansas. At the same time, many large states suffered huge job losses, especially in California and most of the Northeast (Figure 2). These declines persisted between mid-1992 and mid-1993, with a dozen states still having fewer jobs than they did a year ago.

The 102,000 jobs added in Minnesota since June 1990 surpass the 60,000 jobs created between June 1981 and June 1984, another recession/recovery period to which many comparisons can be made.

One crucial comparison is about types of jobs. A common perception about today's job market is that good-paying jobs are being *replaced* by poor-paying ones. Grouping industries by both economic sector and average pay levels shows that the lower-paying industries were the greatest generators of new jobs, with 60 percent of the total (Figure 3). But one-third of the job growth can be traced to medium-paying

Figure 2

## Percent Change in Total Nonfarm Jobs: June 1990 to June 1993

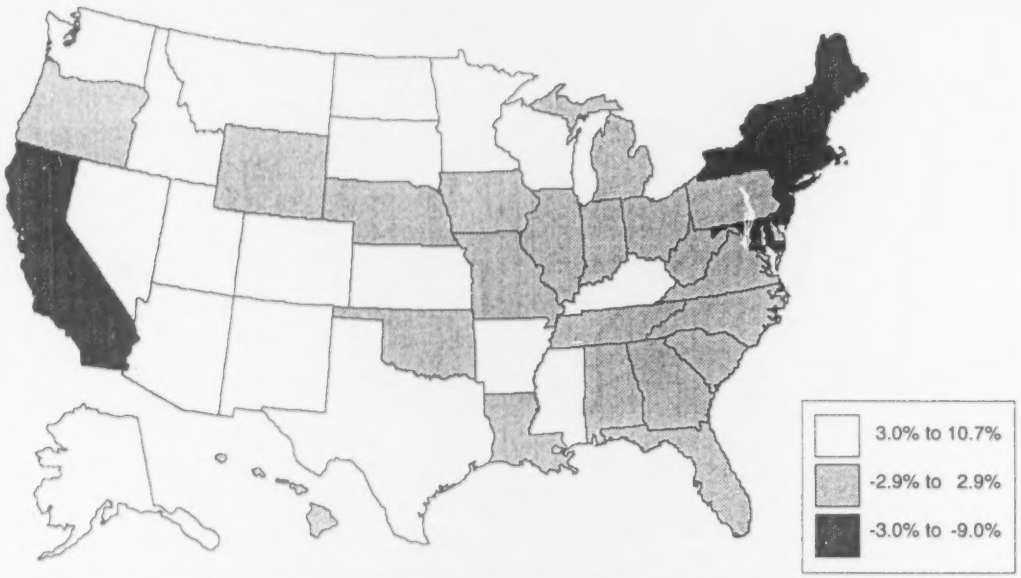



Figure 3

## Job Growth by Industry Pay Levels Minnesota, June 1990 to June 1993

| Industry | 1991 Average Wage | Percent of Avg. Wage | June 1990 | June 1993 | Numeric Change | Percent Change |
|---|---|---|---|---|---|---|
| **Total** | **$ 23,978** | **100** | **2,158,348** | **2,260,152** | **101,804** | **4.7%** |
| **Higher-Paying Industries** | **33,307** | **139** | **750,120** | **758,681** | **8,561** | **1.1%** |
| Mining | 36,940 | 154 | 8,511 | 8,310 | -201 | -2.4% |
| Manufacturing: Durables/Paper/Chemicals | 33,431 | 139 | 286,529 | 278,798 | -7,731 | -2.7% |
| Non-local Transportation | 30,887 | 129 | 58,557 | 56,751 | -1,806 | -3.1% |
| Communications/Utilities | 36,601 | 153 | 35,188 | 34,799 | -389 | -1.1% |
| Wholesale Trade | 31,526 | 131 | 128,383 | 135,040 | 6,657 | 5.2% |
| Nondepository Finance and Insurance | 36,196 | 151 | 68,934 | 77,140 | 8,206 | 11.9% |
| Federal/State Government | 32,392 | 135 | 114,514 | 114,779 | 265 | 0.2% |
| Legal and Professional Services | 34,848 | 145 | 49,504 | 53,064 | 3,560 | 7.2% |
| **Medium-Paying Industries** | **25,123** | **105** | **665,093** | **698,299** | **33,206** | **5.0%** |
| Manufacturing: Other Nondurables | 26,001 | 108 | 125,017 | 127,814 | 2,797 | 2.2% |
| Construction | 29,537 | 123 | 88,014 | 85,952 | -2,062 | -2.3% |
| Banking and Real Estate | 21,898 | 91 | 56,772 | 58,512 | 1,740 | 3.1% |
| Local Government | 23,996 | 100 | 227,872 | 241,480 | 13,608 | 6.0% |
| Private Health Care | 24,950 | 104 | 167,418 | 184,541 | 17,123 | 10.2% |
| **Lower-Paying Industries** | **13,543** | **56** | **743,135** | **803,172** | **60,037** | **8.1%** |
| Local Transportation | 12,229 | 51 | 9,080 | 9,370 | 290 | 3.2% |
| Business Services | 18,322 | 76 | 93,630 | 116,211 | 22,581 | 24.1% |
| Personal/Household/Repair Services | 16,542 | 69 | 57,098 | 57,908 | 810 | 1.4% |
| Recreation Services | 12,138 | 51 | 62,622 | 78,245 | 15,623 | 24.9% |
| Social and Education Services | 14,576 | 61 | 122,019 | 134,976 | 12,957 | 10.6% |
| Eating and Drinking Places | 7,560 | 32 | 138,500 | 142,629 | 4,129 | 3.0% |
| Other Retail Trade | 14,282 | 60 | 260,186 | 263,833 | 3,647 | 1.4% |

industries, and the highest-paying industries gained 8,600 employees. During the 1981 to 1984 recession and recovery, 7,000 positions were added in the highest-paying industries, and 81 percent of all job growth was concentrated in the lowest-paying ones.

As the goods-producing sector shrinks, the services-producing sector continues to expand. We are becoming a state of financiers, health care providers, educators and entertainers, since these are the industry groups growing fastest.

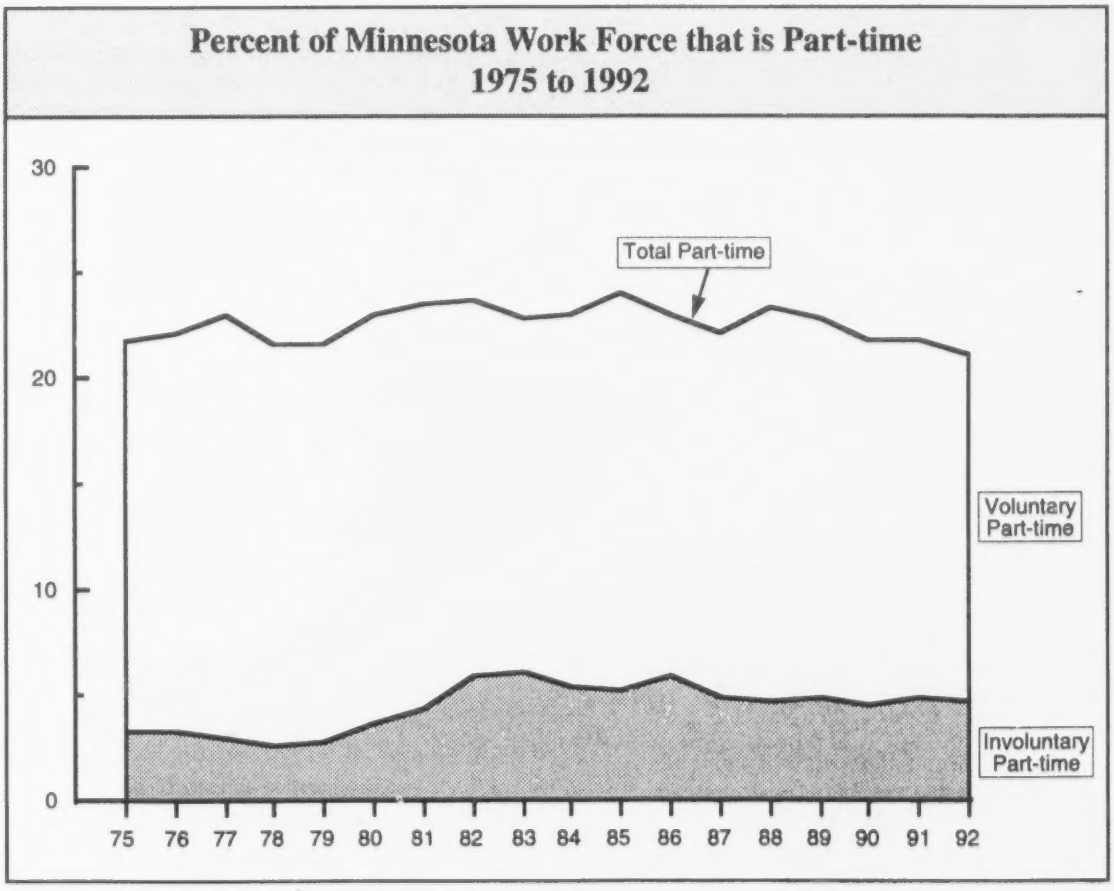
Moreover, the proportion of the workforce that is employed part-time is getting smaller: 21 percent in 1992 from a peak of 24 percent in 1985 (Figure 4).

Some of this trend is because of a shrinking young adult population, who often want to work part-time while attending school. More importantly, the ranks of those who want to work full-time, but can only find part-time work, is also shrinking. In 1983, at the start of the last recovery, 6.1 percent of the labor force was working part-time involuntarily. Last year, only 4.7 percent of all workers were in this predicament.

All in all, the early 1990s have not been any more difficult for Minnesota workers than the early 1980s were, and certainly not as hard on Minnesota as on most other states.

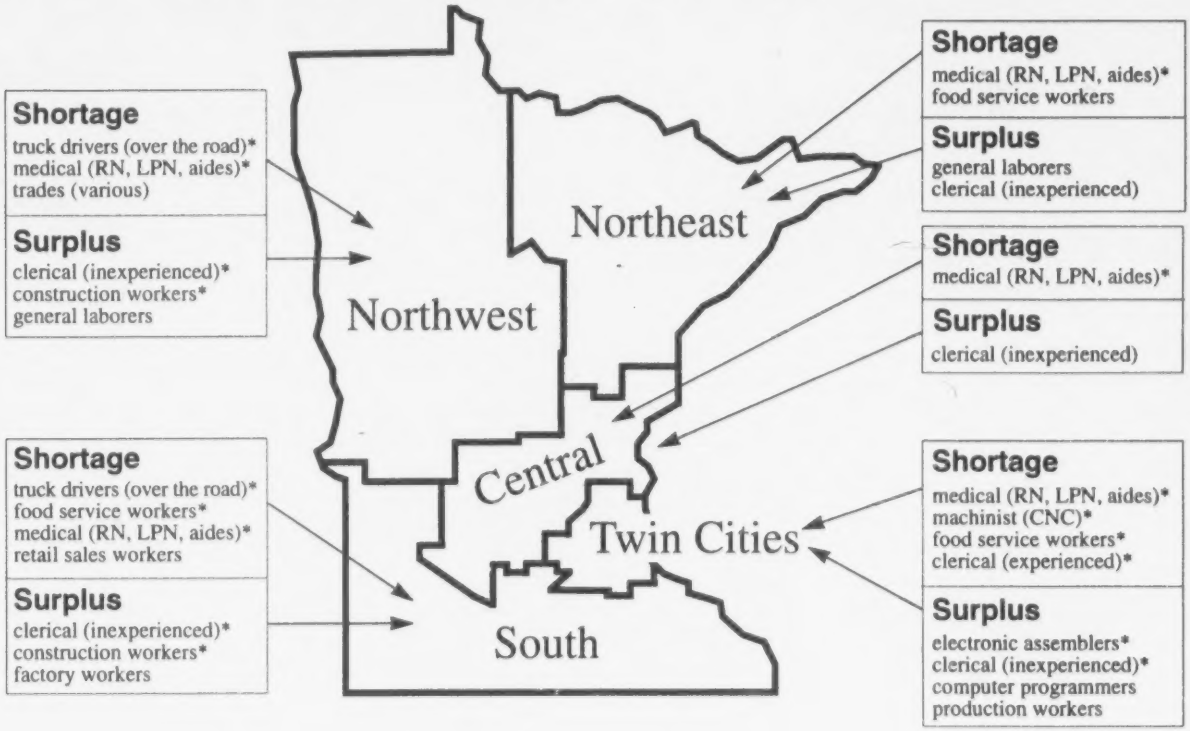
*By Don Hilber*

Figure 4



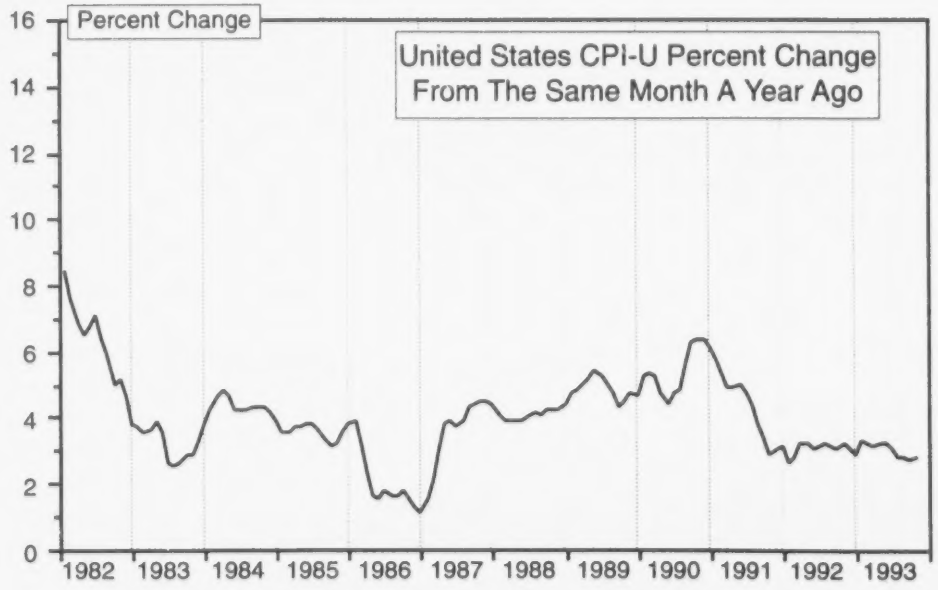
# Regional Worker Shortages and Surpluses

A **worker shortage** exists when an occupation is difficult to fill or there are few qualified applicants. A **worker surplus** exists when there is a sizable excess of qualified applicants. An asterisk (*) after a job indicates that the shortage or surplus has persisted for at least two of the last three quarters.




# Consumer Price Indexes (CPI-U)

| CPI-U % Change From a Year Ago | | |
|---|---|---|
| | U.S. | Twin Cities |
| 1992 | | 2nd |
| Oct | 3.2 | Half |
| Nov | 3.0 | Avg |
| Dec | 2.9 | 3.8 |
| Annual Average | 3.0 | 3.5 |
| 1993 | | |
| Jan | 3.3 | |
| Feb | 3.2 | |
| Mar | 3.1 | 1st |
| Apr | 3.2 | Half |
| May | 3.2 | Avg |
| Jun | 3.0 | 3.7 |
| Jul | 2.8 | |
| Aug | 2.8 | |
| Sep | 2.7 | |
| Oct | 2.8 | |

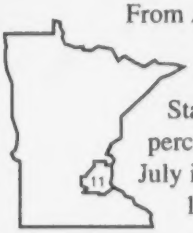



Twin Cities CPI data, which is available only for the first and second half of each year, is considered to be less reliable than the series for the U.S. For gauging state price changes the US CPI is best. Both the U.S and Twin Cities indexes (CPI-W and CPI-U) are available by calling (612) 296-6545.

# Areas of the State

## Minneapolis - St. Paul MSA

### Job Growth Fourth Highest in Nation




From April through June, total nonagricultural employment in the Twin Cities Metropolitan Statistical Area (MSA) stayed at 2.2 percent above last year's levels, and in July it was 2.1 percent higher than July 1992. This rate of job growth compares favorably at the national level as the Twin Cities ranks fourth in annual job creation among major metropolitan areas (MSAs with employment of 800,000 or more).

Two-thirds of all the job growth that occurred in the Twin Cities since last July was in the service sector (21,200 jobs). Business services expanded by 8,700 jobs of which 5,600 were in personnel supply services (temporary help agencies). Health care expanded by 4,000 new jobs and social services added 2,500 payroll jobs over the year. Local government education also grew by 1,300 jobs in the Twin Cities since July 1992.

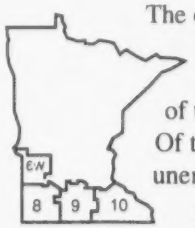
Manufacturing, which had been posting slight job gains throughout most of the winter, began to soften beginning in May and continued to decline in June and July. Most of the declines were in durable goods manufacturing, while nondurable goods has averaged nearly a 1.5 percent increase in jobs so far in 1993. Transportation employment has been below last year's levels every month this year, averaging a 3 percent decline so far in 1993. Retail trade has come on strong in the Twin Cities metropolitan area ever since the opening of the Mall of America last year. Job growth continues in retail trade, with nearly 6,000 new jobs created since July 1992. Most of the retail categories in the employer survey have shown significant job growth over the past year.

Construction employment has followed the national pattern and has declined through spring and summer, compared to last year. Some types of construction were affected by the wet weather; heavy construction excluding building (which includes road construction) was down 10.9 percent and 8.6 percent, respectively, in June and July compared to 1992. Low mortgage interest rates had a positive effect, however, as new home permits were up significantly from a year ago (up 4.9 percent from July 1992).

The unemployment rate in the Twin Cities was 4 percent in July, down one percentage point from June 1993. The statewide rate in July 1993 was 4.3 percent and the national unemployment rate (unadjusted) was 6.9 percent. In July 1992 and July 1991 the Twin Cities unemployment rates were 3.8 percent and 3.9 percent respectively.

## Southern Minnesota

### Unemployment Remains Low Despite Flooding




The overall unemployment rate in July for Southern Minnesota was 3.9 percent. This was the lowest rate of the four major areas of the state. Of the nine counties that had unemployment rates of less than 3 percent in July, seven of them are in Southern Minnesota. The Rochester Metropolitan Statistical Area (MSA) consistently has the lowest rate among the MSAs and this was true again in July with 2.8 percent unemployment.

Parts of Southern Minnesota were hit hard by this summer's flooding as evidenced by the Disaster Unemployment Assistance (DUA) activity in this part of the state. The regions in West Central and Southwestern Minnesota, which are in the Mississippi River watershed, have seen the highest number of DUA claimants. The majority of DUA claimants have been farmers, while most of the rest have been migrant workers.

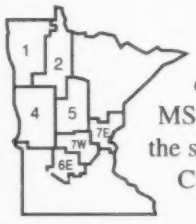
At the time of publication, none of the previously announced layoffs (1,900 jobs) at the IBM facility in Rochester had occurred, although some employees have just begun to receive 60-day layoff notices. This single layoff represents roughly 3 percent of all nonagricultural jobs in Olmsted County, clearly a historic hit to the manufacturing sector in this area. Rochester has averaged 3.7 percent annual job growth

over the last five years, so it is possible that the 1,900 jobs could be regained in a little over a year.

Two factors that will probably greatly affect this recovery are: the national economy, and the rate of job growth in health services (Rochester's other major area of employment). So far in 1993, annual growth of total nonagricultural jobs in Rochester averaged 2 percent. Most of the new jobs occurred ironically, in manufacturing (both durable and nondurable goods) and in services, particularly health services.

## Central and Northwestern Minnesota

### St. Cloud Still "Hotbed" of Job Growth



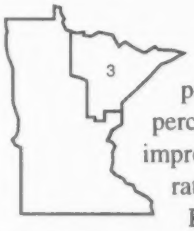

The monthly employer survey of wage and salary jobs continues to show the St. Cloud MSA as the "hotbed" of job growth in the state. In the first half of 1993, St. Cloud has averaged an annual growth rate of 4.3 percent in total nonfarm jobs. This is well above the statewide average of 2.5 percent for the same time period. Gauging from the job counts posted this year, it would be fairly safe to predict that the St. Cloud economy will generate somewhere between three and four thousand new jobs in 1993, which will make it a very good year for job growth.

The seven economic development regions of this section of the state averaged an unemployment rate of 5 percent in July 1993. By county, unemployment rates in this large and diverse area ranged from 2.3 percent in Lake of the Woods County to 11.9 percent in Red Lake County. The St. Cloud MSA unemployment rate was 4.4 percent, up from 4 percent in July 1992.

The Moorhead Job Service Office has had a flurry of activity in processing DUA claims as Clay County generated more claims than any other county in the state. Disaster claims started in mid-growing season, when migrant workers were not able to get out into the fields to perform the normal weeding activity, and have continued right through the harvest. The Agriculture Department has predicted poor harvests for corn, soybeans and wheat, Minnesota's three leading crops.

## Northeast Minnesota

### Retail and Shipping Decline




Unemployment in Economic Development Region 3 was 6.4 percent in July 1993, down from 8.6 percent in June. This is also an improvement from July 1992 when the rate was 6.6 percent. Even though Region 3 has the highest unemployment rate among the regions, it still registers below the national unemployment rate of 6.9 percent. The City of Duluth had an unemployment rate of 5.2 percent, compared to 5 percent in July 1992.

On the Iron Range, mining posted slight employment increases in July as several area mines increased pellet production, anticipating improved steel demand. Tourism was down this summer, as resort owners throughout the state, reported many cancellations and early departures due to wet weather conditions.

In the City of Duluth, total nonfarm job counts for July 1993 are 1.9 percent below the totals of a year ago. The July levels of employment are a result of a loss of 647 service-producing and 335 goods-producing jobs compared to July 1992. The largest losses within the service-producing sector were in trade, and specifically in eating and drinking establishments (-300 jobs). Shipping has also slackened this summer, resulting in a loss of 200 jobs in water transportation compared to last July.

Despite these job losses there are several business developments going on now and looming on the horizon (see "Business Developments" on the following page) that will probably have a very positive effect on the Duluth labor market. Retail trade, in particular, should rebound as several new stores and a new shopping mall open up in the very near future.

*By Rick Caligiuri*

# Business Developments

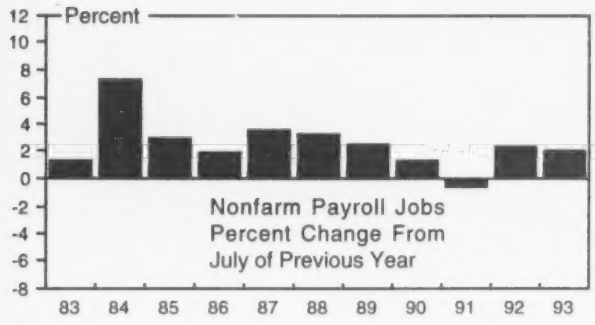
- **Gander Mountain** recently opened a sporting goods store in Duluth employing approximately 80 people. Also, the **Stoneridge Mall** is nearing completion with some stores opening by October. The mall will be anchored by Shopko, Cub Foods and Toys R Us and is expected to bring 600 new jobs to the Duluth area.
- **Cirrus Manufacturing** of Baribou, Wisc. will build a plant in Duluth that manufactures parts for experimental airplane kits. The plant is expected to employ between 60 and 80 people and should be in operation sometime in 1995.
- The **Marquette County (Michigan) Economic Development Corp**. received a federal grant of $180,000 earlier this year to study the feasibility of an international expressway which would go from Sault Ste.Marie, Ontario, through the upper peninsula of Michigan and northern Wisconsin to Duluth. The study, which begins this fall, will take two years to complete.
- The **Duluth Clinic** continues to expand and has added approximately 100 new staff each year for the last two years.
- A new **Target** store opened in late July in Virginia employing 100 workers.
- In Grand Rapids a new **Americ Inn Hotel** opened in August employing 40 people.
- The new municipally owned and operated **Prairie Correctional Facility** in Appleton, MN, opened this summer and will provide 170 new jobs to the area. City officials signed a contract with the Commonwealth of Puerto Rico to fill all 516 beds at the medium-security prison.
- A new **Kohl's** department store opened early this summer in St. Cloud. The store is expected to employ nearly 100 people.
- **Phenix** Inc. of Mankato has developed a granite-like building material called Environ which is made from recycled newspaper and local soybeans. The material is somewhat flexible and workable like wood, but it is more than three times harder than oak and contains no hazardous or toxic materials. Phenix currently has 25 employees and expects to hire 100 more over the next few years as it reaches full production.
- **Envirosys L.P.** has opened a manufacturing plant in Moorhead that produces packaging from recycled paper. The facility will start up with 30 employees in September and expects to be up to 90 by next summer.
- **Carlson Companies Inc.** announced in June that 300 employees will be laid off by the end of the year due to a restructuring of their marketing division.
- About 200 people lost their jobs with the closing of two printing operations in the Twin Cities area. **Northstar Printing & Mailing** of Golden Valley and **Brouhgton Printing** of Plymouth are being liquidated because their parent holding company, the Palaru Corp., could not restructure their long-term debt.
- The **Prudential Insurance Co.** announced late in May that due to a regional consolidation of its Preferred Financial Services operation, 450 jobs outside of Minnesota will be moved to its office in Plymouth. In late August the company announced that 900 administrative jobs would be cut from the Minneapolis-based North Central Group Operations in another consolidation effort to boost productivity and drive down the administrative costs of health care insurance. An unspecified number of those affected may have the opportunity to transfer to other regional administrative centers, or to fill some of the 450 jobs previously announced.
- In June, **Deluxe Corp.** announced that it would close 16 of its 60 check-printing plants, resulting in about 500 layoffs by the end of the year. The company declined to specify which plants would be affected, so it is not known how many layoffs will occur here in Minnesota. Only about 1,550 of the 10,300 employees in the check-printing division are based in Minnesota.
- In August, Minneapolis officials announced a proposal for building a suburban-styled shopping center in northeast Minneapolis. The center would be anchored by a **Target** store and **Rainbow Foods** and will have anywhere from eight to 20 stores. The project is expected to cost between $20 million and $35 million and could create more than 900 jobs. City officials estimated it could be open by early 1995.

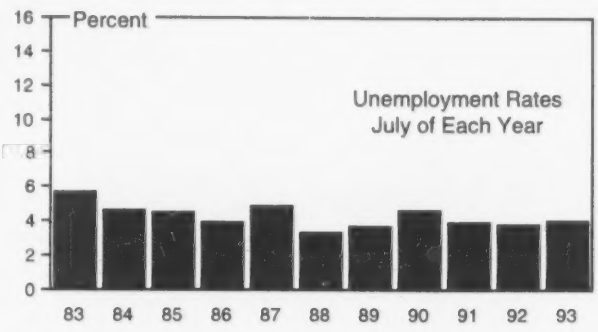
"Regional Business Developments" is compiled from newspapers, periodicals, trade publications and reports from local Job Service offices as well as other local area contacts. We are always looking for more material, so if you see anything relating to Minnesota businesses either adding or laying off workers (or plans to that effect); or any business developments relevant to local labor market conditions please call, send or fax them to us. Due to space limitations we may not be able to list all developments. Those that cite specific numbers of jobs and are actual events (not proposals) will receive preference.

Rick Caligiuri - Research Office, MN Dept. of Jobs and Training
390 N. Robert, St. Paul, MN 55101
(612) 297-5450 Voice or (612) 282-5429 Fax.

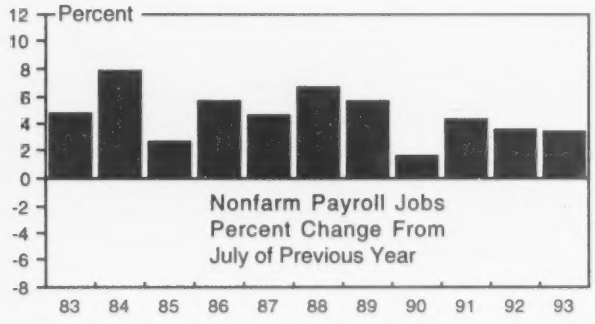
# Nonfarm Jobs and Unemployment Rates for MN Metro Areas

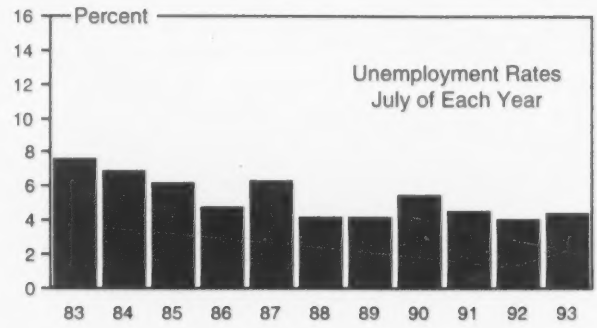
## Minneapolis-St. Paul MSA



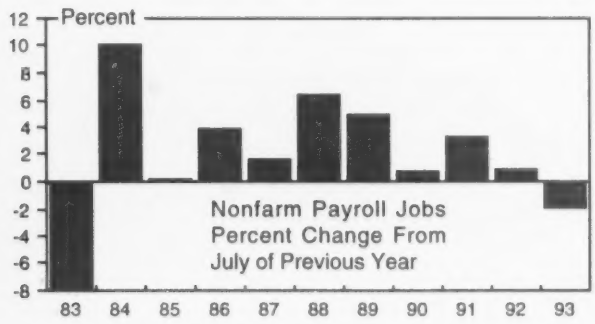



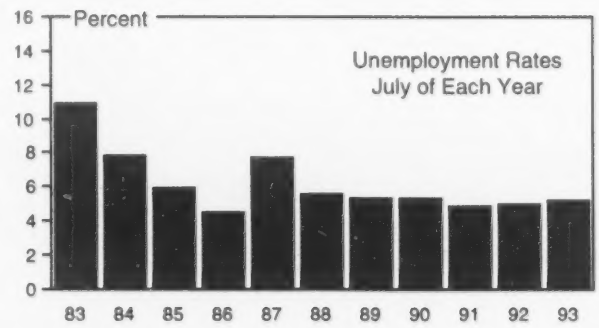

## St. Cloud MSA



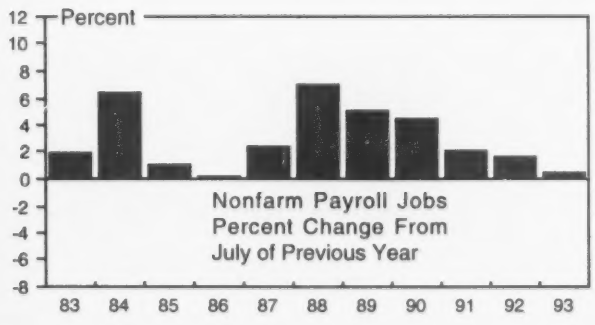



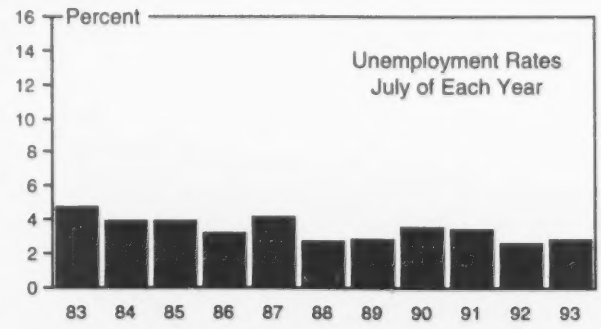

## Duluth City




## Rochester MSA



# Feature Article

## Train America's Workforce

**Overview**:

Train America's Workforce is a joint initiative of the U. S. Department of Labor and the American Society for Training and Development (ASTD). It is a national initiative which is being sponsored locally by the Southern Minnesota Chapter of the American Society for Training and Development. This Chapter has nearly 1,000 members from the public, private and non-profit sectors. The program in Minnesota has been called "Achieving Workforce Excellence/Train America's Workforce." The local Chapter of ASTD has held workshops, seminars, training sessions, and given numerous presentations of this information to businesses, chambers of commerce, private industry councils, and other educational and economic development groups around Minnesota.

Briefly, this program asserts that we have gone from an "old economy" to a "new economy" and for this country to be successful in the new economy, a number of significant changes will be necessary. These changes involve meeting new global competitive standards, preparing for new jobs, implementing high-performance workplaces, and developing a workforce with the kinds of skills which will enable us to meet these new competitive standards. (Much of the material for this article is taken from the publication *America and the New Economy* by Anthony Carnevale published by the U.S. Department of Labor and ASTD)

**The Old Economy:**

The old economy might also be called the mass production economy. Characteristics of this era were the rationalization of economic activity and simplifying and increasing the scale of activity in order to provide large quantities at the lowest costs. High productivity was an important component of the mass production economy. The mass production system required employees with the ability to tailor machine products to specific uses. The educational system was well designed to produce the kind of workforce which was needed in this mass production economy. The nation required an urban, industrial labor force made up of highly skilled white-collar and technical employees and blue-collar workers.

The pace and path of economic development ran into new obstacles in the early 1970s. A productivity decline indicated that there was something wrong with the way we were using technology, people and the organization of work. By the 1980s, postwar productivity resulted in a saturation of mass markets at home, encouraging the globalization of competition.

**Forces Driving the Change from the Old to the New Economy:**

A number of forces have been driving the movement toward a new economy both in the United States and throughout the world. These forces are:

- Increasing wealth of nations
- Globalization of economic activity
- Diversification of taste
- Increasing value of human time
- Commercialization of free labor (eg., housework, day care, care of the elderly)
- Increasing participation of consumers in production and service delivery
- Technical advances

**The New Economy:**

As we enter the last decade of the 20th century, these forces have been driving this country (and all other nations) on a path toward a new economy. Inside the workplace, flexible technology needs to be matched with more skilled and autonomous workers and work teams. New, more flexible work organizations that drive authority and resources toward the point of production, service delivery, and the customer are also required if we are to take advantage of the inherent potential of new human and machine combinations.

## New Global Competitive Standards:

In addition to the prerequisites of high productivity and low costs of the old economy, there are five new competitive standards which any country has to meet in order to succeed in the new, global economy. These are: **quality, variety, customization, convenience and timeliness.**

### The New Technical/Knowledge Worker

*"These folks don't jibe with our traditional stereotypes of white collar and blue, which may be why we haven't accorded them sufficient notice or respect. As described by Barley, they "often wear white collars, carry briefcases, conduct relatively sophisticated and mathematical analysis, and speak with an educated flair."*

*But many also work with their hands, make objects, repair equipment, and perhaps most important, get dirty.*

*They range from medical technologists to paralegals, from so-called test-and-pay technicians--to the person who hooked up your computer.*

*Their ranks are growing. Indeed, if you wonder where the good jobs are going to be in the nineties, look here.*

*Together with professionals--accountants, scientists, engineers, and the like-whom they increasingly resemble and with whom the Census Bureau lumps them, they already represent 16% of the workforce. If the projections hold, some experts think that by the year 2000 they could be the biggest segment at 20% or over 23 million people, substantially exceeding the number of manufacturing operatives and laborers.*

*To some extent this segment in the employment statistics approximates that much and loosely used term "knowledge workers," these people, along with their professional brethren, are it.*

*The biggest force behind the ascendance of technicians has been that old devil, or angel, technology."*

*Fortune Magazine, May 17, 1993*

This came from a study done by Barley at Cornell which examined a remarkably overlooked echelon of the American labor force--technical workers.

## Jobs and the New Economy

**The quantity of jobs.** The American economy is expected to add 1.5 million new jobs each year between now and the year 2000. Although the new economy will likely create jobs in the aggregate, the processes of economic change will inevitably distribute new jobs unevenly. New technologies, the globalization of economic activity, and organizational change will create good jobs for the majority, result in bad jobs for some and take away jobs from a few. Moreover, the jobs created by technology, trade, and competitive changes almost never go to the people who have lost their jobs because of these forces.

The employed majority will need to be sensitive to both the poor and the dislocated. A new social compact will be required. In the current political context, the dislocated employees are the forgotten constituency.

**The distribution of jobs.** To equate the growth of service jobs with a decline in the quality of jobs available is misguided. The phenomenal growth in service jobs is not the result of competitive failure. Instead, it reflects the growing service content all industries require to meet the new competitive standards.

Manufacturing output continues to grow. The loss of jobs in basic industries can be understood, at least in part, as a result of competitive restructuring of jobs. Production workers are being displaced by a smaller number of technicians who use more technology to produce vastly greater levels of output per worker. Meanwhile, manufacturing jobs in management and other service-oriented functions are growing.

**The service revolution.** The most noticeable trend in the kinds of jobs typical of the new economy will be a continuation in the shift toward service work. In the last decade of the century, manufacturing jobs will decline by an estimated 300,000 jobs, and extractive jobs in agriculture and mining will decline by a similar amount. In contrast, service jobs are expected to increase by almost 17 million. In manufacturing, there will be a loss of production jobs but a gain of almost a million jobs for managers, professionals, and marketing and sales personnel.

**The quality of jobs.** Despite the flat wage growth in the United States since the early 1970s, there have been dramatic shifts in earnings among different groups of Americans. Wage increases in the new economy are rationed with an increasingly uneven hand resulting in a growing maldistribution of income in the United States. Now, more than ever, learning is the rationing hand that distributes earnings in the American economy. People with the most education and access to learning on the job are doing best; those with the least education and least access to learning on the job are doing worst.

## Skills and the New Economy

The new economy will have profound implications for the way we will use people on the job. The new competitive requirements will require new job designs, new organizational structures and more

skilled workers. New flexible technologies will change skill requirements and the context in which skills are used at work.

The publication *Workplace Basics: The Skills Employers Want* was also a part of the joint initiative of the U. S. Department of Labor and the American Society for Training and Development. This study identifies seven clusters of skills which the work force will need in order to meet the new competitive standards of **quality, variety, customization, convenience and timeliness.**

**The Foundation: Learning to Learn:**

This is the most important skill because it unlocks future success by leading to competency in all the other basic workplace skills. Technology makes it possible to tailor a unique education or training program to each individual based on his or her learning style and also to deliver training outside the classroom, in the home and in the factory.

**Competence: The Three R's - Reading, Writing, Computation:**

In order for organizations to compete successfully they need employees who have sound academic skills. It is estimated that workers spend an average of 1.5 to 2 hours per day reading forms, charts, graphs, manuals, computer terminals, etc. Writing is important when the main form of communicating policies, procedures and concepts is in written form. Computation is needed in completing production reports, inventories, measuring quality, budgets, forecast and statistical process control charts, to just name a few.

**Communications:**

The average person spends 8.5% of his/her communication time writing, 13.3% of that time reading, 23% speaking and 55% of the time listening. With the increased importance of the line employee working in teams with other employees or interacting with customers, the importance of effective communication cannot be over emphasized.

**Adaptability, Creative Thinking and Problem-Solving:**

Employees need the ability to recognize and define problems, invent solutions, implement those solutions and evaluate results. The skills needed to accomplish this fall into the areas of cognitive skills, group interaction skills and problem-solving skills. These skills once were just the province of the most advanced students--now they are necessary for workers at all levels.

**Personal Management:**

This includes the need for high self-esteem, ability to set goals, self-motivation and responsibility for one's own personal and career development. In today's business environment, mergers, restructuring and layoffs can erode an individual's self-esteem. Paradoxically, the new economy requires workers who are much more self-motivated and who can take initiatives and responsibility. Increasingly, employees must take responsibility for their own long-term personal career development. This should be a shared responsibility of both the employer and the employee, but with rapid job changes and major career changes it is vital that each individual assume greater responsibility for his/her own long-term career development. Few people will go to work for the same organization and remain there for their entire career.

**Group Effectiveness - Negotiations - Teamwork:**

Individuals need the ability to balance appropriate behavior, cope with the undesirable behavior of others, deal with stress, inspire others, share responsibility, and interact easily with others. These same skills are also crucial to negotiating, which is another essential skill in effective teamwork. Interpersonal, negotiation, and teamwork skills are the basic tools for building organizations that are flexible and adaptable in order to continue to be competitive.

**Influence - Organizational Effectiveness - Leadership:**

To be effective in the modern organization, employees must have a feel for how the organization works, understand why the organization exists, and know how one can move through the organization. Leadership is no longer a prerogative of a handful of top managers--each employee working in self-directed work teams must learn to take leadership appropriate to the task at hand. This has also been called "situational leadership."

This particular list of skills required in the new economy is parallel to other studies such as the Secretary's Commission on Achieving Necessary Skills (SCANS) produced by the Secretary of Labor. That report identifies five basic competencies for effective workers: allocating resources, interpersonal skills, ability to handle information, ability to understand systems and ability to utilize appropriate technology. These skills are built on a basic foundation similar to those of the New Economy report--basic skills, thinking skills, and personal qualities such as individual responsibility, self-esteem, sociability, self-management and integrity.

*By Richard Dethmers*

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Achieving Excellence in Minnesota's Workforce
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## Minnesota's Labor Force in 1992

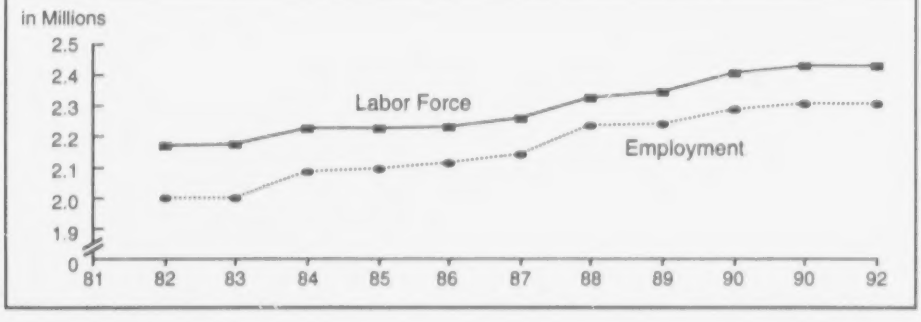
Developments in Minnesota's labor force in 1992 reflected the recovery from the recession of 1990 to mid-1991. Gains in employment were small, and employment growth was much less than what is normally expected when the economy enters a recovery phase.

The downturn in the early 1990s affected workers who typically are not directly hit by layoffs: "white collar" professionals and technical workers. The percentage of these persons among the unemployed was 24.9 in 1992, as compared to 13.4 in 1982, which was also a post-recession recovery period.

The computer industry and many defense contractors were adversely affected by cutbacks and consolidations in the early 1990s. These industries typically employ highly skilled, well-paid professionals and technical workers, many of whom have found it difficult to secure comparable positions in the state.

Figure 1

Minnesota's Labor Force and Employment
1982 - 1992




- Total employment in the state was virtually unchanged between 1991 and 1992. Annual average figures showed 2,307,000 Minnesotans employed in 1991 compared to 2,306,000 in 1992.
- Total employment has not remained unchanged since the 1982-83 period.
- Minnesota's labor force was an estimated 2,431,000 in both 1991 and 1992. Unemployment remained stable at approximately 125,000 in both years.
- Minnesota's unemployment rate of 5.1 percent in 1992 was well below the nation's 7.4 percent rate.

This article looks at the annual data compiled from the Current Population Survey (CPS), which is valuable because it shows what is happening to the labor force in the years between Decennial Censuses. The CPS is the monthly household survey conducted by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of 60,000 households nationwide, with interviewers asking questions concerning labor force participation of household members 16 years of age or older. The CPS offers a wealth of demographic information used for analysis of social as well as economic trends, in addition to providing the most watched indicator of the series -- the unemployment rate.

Figure 2

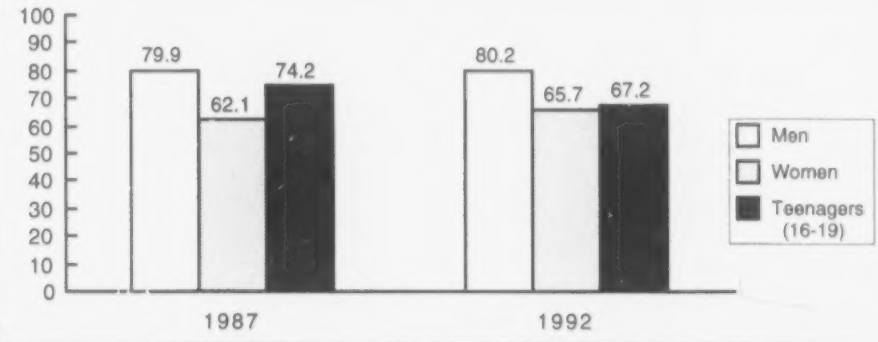
## Composition of Minnesota's Labor Force in 1992

| | Civilian non-institutional population (16+) | Civilian labor force | | Employment | | Unemployment | |
|---|---|---|---|---|---|---|---|
| | | Number | Percent of population 1) | Number | Percent of population 2) | Number | Rate |
| | All numbers in thousands | | | | | | |
| **Total** | 3,346 | 2,431 | 72.6 | 2,306 | 68.9 | 125 | 5.1 |
| Men | 1,605 | 1,287 | 80.2 | 1,211 | 75.5 | 76 | 5.9 |
| Women | 1,742 | 1,144 | 65.7 | 1,095 | 62.9 | 49 | 4.3 |
| Both sexes, 16 to 19 years | 234 | 158 | 67.2 | 139 | 59.1 | 19 | 12.1 |
| White | 3,190 | 2,335 | 73.2 | 2,228 | 69.9 | 107 | 4.6 |
| Men | 1,535 | 1,236 | 80.5 | 1,168 | 76.1 | 68 | 5.5 |
| Women | 1,655 | 1,100 | 66.4 | 1,060 | 64.1 | 39 | 3.6 |
| Both sexes, 16 to 19 years | 215 | 149 | 69.4 | 135 | 62.8 | 14 | 9.5 |
| Black (3) | 85 | 53 | 62.3 | 38 | 45.1 | 15 | 27.5 |
| Single (3) (never married) | 895 | 716 | 80.0 | 657 | 73.4 | 59 | 8.2 |
| Married (3), spouse present | 1,895 | 1,420 | 74.9 | 1,371 | 72.3 | 49 | 3.5 |
| Other marital status (3) | 557 | 295 | 53.1 | 279 | 50.0 | 17 | 5.7 |

1) Also known as the Labor Force Participation Rate
2) Also known as the Employment Population Ratio
3) Sub-groups or further breakouts not possible because of sample size

Figure 3

## Changes in the Labor Force Participation Rate




- In 1992, younger persons, minority individuals, and single (never married) persons (who are generally younger than the average for all adults) had higher rates of unemployment.

- The labor force participation rate for men has remained fairly constant over the past five years, while the rate for women continued to climb in four out of the past five years. Further labor force gains may not be as dramatic. The rate for women may be nearing its highest possible level as the maximum percentage of women who want to be in the labor force may be close to realization.

- The labor force participation rate for teenagers fell during the period 1987-92. The number of persons aged 16-19 is smaller now than in past years. Other options such as school attendance most likely are affecting the labor force participation rate of this group. Also, in the recessionary period of 1990-91, the scarcity of available jobs discouraged many teenagers, who remained out of the labor force.

Figure 4

**Percent Distribution of Employed Persons by Occupational Category**
**1992**

| Occupation | Minnesota | Minneapolis/ St. Paul MSA |
|---|---|---|
| Executive, Administrative and Managerial | 11.8 | 14.0 |
| Professional Specialty | 12.4 | 14.2 |
| Technicians & Related Support | 3.6 | 4.1 |
| Sales | 11.8 | 13.2 |
| Administrative Support (Clerical) | 16.6 | 18.9 |
| Service | 13.9 | 12.8 |
| Precision, Production, Craft & Repair | 10.2 | 8.9 |
| Machine Operators, Assemblers & Inspectors | 6.3 | 6.5 |
| Transportation & Material Moving | 3.3 | 2.9 |
| Handlers, Equipment Cleaners, Helpers & Laborers | 4.2 | 3.6 |
| Farming, Forestry, Fishing & Mining | 5.9 | 0.9 |

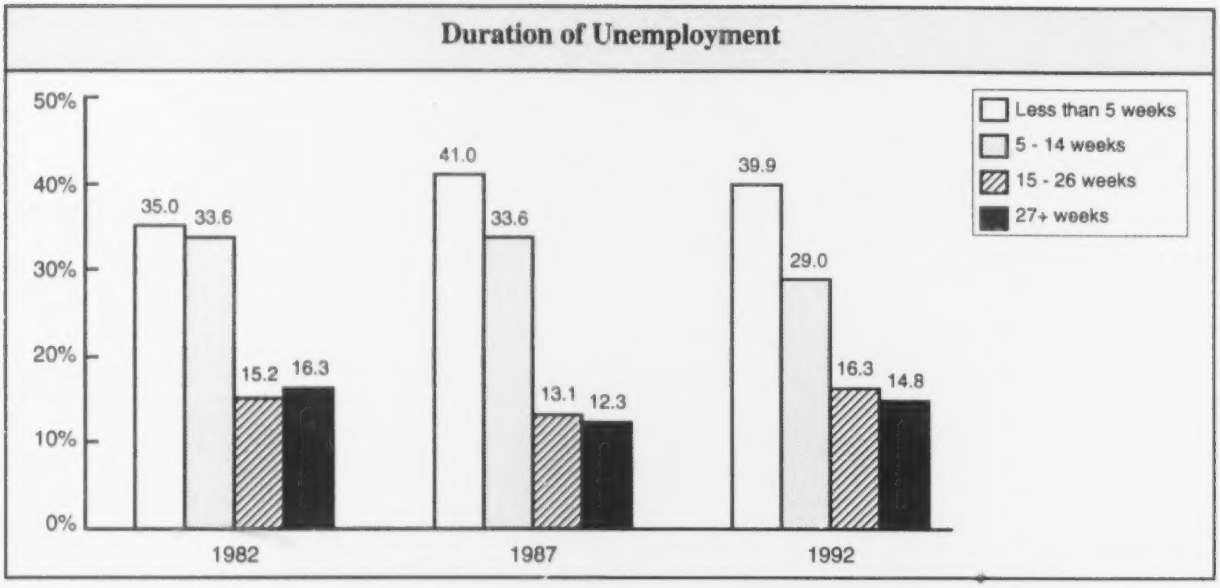
Figure 5

Another noteworthy trend was the average spell of unemployment endured by laid-off workers. In more prosperous years, such as 1987, the majority of the unemployed were out of work less than 15 weeks (see Figure 6). While this was also true in 1992, the percentage of the unemployed who were out of work for more than 15 weeks was over 31 percent, as compared to 25 percent in 1987. Clearly, securing a new job has been more difficult for many more individuals than in the late 1980s, a period of relative economic prosperity.

Women and minorities continue to enter the state's labor force. The labor force participation rate for men has plateaued, while larger percentages of working age females are seeking and obtaining employment. This trend has slowed somewhat from the 1970s and 1980s but is still evident.

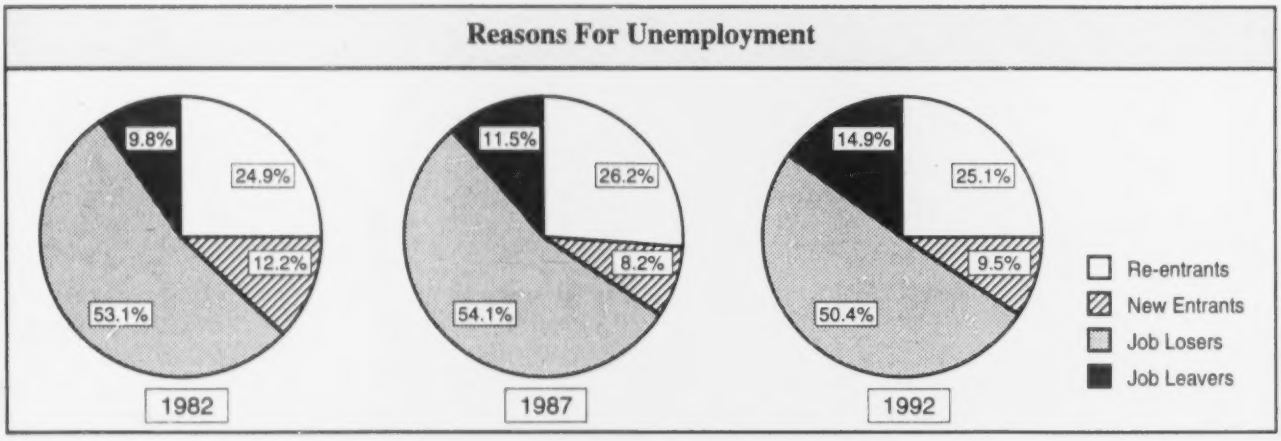
Minnesota's economic picture seems to be strengthening, albeit slowly. Employment gains are occurring, although not in higher paying manufacturing jobs. Still, the outlook remains optimistic, and will continue to be favorable as consumer confidence and other business indicators improve.

Figure 6




- In 1992, longer spells of unemployment became more typical. The percentages of the unemployed who were jobless for 15 weeks or more (and 27 weeks or more) increased noticeably from 1987's percentages.
- The slowdown in rehiring which followed the economic downturn of the early 1990s resulted in longer average spells of unemployment in 1992.

Figure 7




- Among the unemployed, a smaller percentage were job losers in 1992 than in 1987. This probably was a result of the recession coming to an end in the state, and fewer workers directly affected by layoffs.

*By Kevin Alaspa*

# Occupational Outlook

## *Shifts in the 80s Spur Growth in Unexpected Places*

In the early 1980s, the Department of Jobs and Training (DJT), forecasted that sales and managerial jobs would be the decade's fastest-growing. DJT also predicted that professional jobs would grow at a slower-than-average rate (with post-secondary teachers declining and little growth among registered nurses), and that jobs in farming, forestry and fishing would decline.

As with most predictions, some of DJT's 1980-90 projections happened, some did not, and there were some surprises.

One big surprise came from the professional category (Figure 1). The number of jobs grew four times as fast as predicted and added the most jobs of all the major occupational categories. This group was third-fastest, following sales occupations and technician jobs.

In the industry category, the growth of 177,000 new jobs in services stands out. That's more than half of the 307,000 total employment increase. The three fastest-growing groups were finance/insurance/real estate, services, and nondurable goods manufacturing.

Figure 1

**Actual and Projected Employment Changes**
**Minnesota, 1980 to 1990**

| | Actual | | | | Projected | | Difference |
|---|---|---|---|---|---|---|---|
| | Employment | | 1980 - 1990 | | 1980 - 1990 | | |
| | 1980 | 1990 | Numeric Change | Percent Change | Numeric Change | Percent Change | Percentage Point Difference |
| **By Occupational Group:** | | | | | | | |
| Total, All Occupations | 1,885,521 | 2,192,417 | 306,896 | 16 % | 253,060 | 12 % | 4 |
| Managerial and Related | 200,130 | 261,293 | 61,163 | 31 | 50,492 | 23 | 8 |
| Professional Specialty | 234,365 | 312,646 | 78,281 | 33 | 19,948 | 8 | 25 |
| Technicians and Related Support | 65,735 | 90,868 | 25,133 | 38 | 11,690 | 18 | 20 |
| Sales | 187,186 | 259,017 | 71,831 | 38 | 46,810 | 23 | 15 |
| Administrative Support, including Clerical | 314,988 | 358,868 | 43,880 | 14 | 54,030 | 16 | -2 |
| Service Occupations | 264,633 | 301,326 | 36,693 | 14 | 52,940 | 16 | -3 |
| Farming, Forestry, and Fishing | 106,902 | 83,245 | -23,657 | -22 | -12,310 | -10 | -12 |
| Precision Production, Craft, and Repair | 212,891 | 222,013 | 9,122 | 4 | 8,410 | 4 | 1 |
| Machine Operators, Assemblers, Inspectors | 145,440 | 142,375 | -3,065 | -2 | 13,329 | 9 | -11 |
| Transportation and Material Moving | 76,568 | 82,014 | 5,446 | 7 | 9,343 | 11 | -4 |
| Handlers, Equip. Cleaners, Helpers, Laborers | 76,683 | 78,752 | 2,069 | 3 | -1,610 | -2 | 5 |
| **By Industry Group:** | | | | | | | |
| Total, All Industries | 1,885,521 | 2,192,417 | 306,896 | 16 % | 252,900 | 12 % | 4 |
| Agriculture, Forestry, Fisheries, Mining | 125,868 | 99,386 | -26,482 | -21 | -18,120 | -13 | -8 |
| Construction | 99,380 | 109,859 | 10,479 | 11 | -5,560 | -5 | 16 |
| Manufacturing, Nondurable Goods | 131,666 | 159,512 | 27,846 | 21 | 11,210 | 8 | 14 |
| Manufacturing, Durable Goods | 249,097 | 240,080 | -9,017 | -4 | 24,930 | 11 | -14 |
| Transportation | 87,335 | 101,768 | 14,433 | 17 | 2,910 | 3 | 13 |
| Communications and Other Public Utilities | 41,776 | 44,164 | 2,388 | 6 | 5,480 | 13 | -7 |
| Wholesale Trade | 92,232 | 111,585 | 19,353 | 21 | 22,640 | 18 | 3 |
| Retail Trade | 321,167 | 372,662 | 51,495 | 16 | 71,150 | 20 | -4 |
| Finance, Insurance, and Real Estate | 107,669 | 145,943 | 38,274 | 36 | 19,700 | 19 | 17 |
| Services | 559,780 | 737,254 | 177,474 | 32 | 110,050 | 17 | 15 |
| Public Administration | 69,551 | 70,204 | 653 | 1 | 7,890 | 12 | -11 |

Sources: Actual data from 1980 and 1990 Censuses; projected data from Minnesota Department of Jobs & Training's Minnesota Employment Outlook to 1990

**Predicting Change:** Computers affected many of the predictions made 10 years ago. Manufacturing employment had peaked in 1980, and although the 1980-82 recession had meant job loss, these jobs were anticipated to be regained and further growth was expected. While that happened in some industries, the large movement from mainframes to personal computers was not foreseen in the industrial machinery projection. Secondly, while automation was already widespread, some of the ways in which technology subsequently affected employment were unexpected. Secretaries/stenographers/typists were less in demand while the need for math and computer scientists grew much faster than anticipated. Another change that came as a surprise was the unexpected need for postsecondary teachers. An anticipated drop in traditional-age students was offset by an unexpected increase in non-traditional-age college students.

**"Every managerial, professional, technician, and sales cluster gained jobs."**

**Growth Industries:** Forty-two industries had comparable data for 1980 and 1990, out of a total of 66 industries, so the industry comparisons lend information but do not tell the entire story. For example, services was the industry group adding the most jobs, but only 3 of the 16 service industries were comparable enough to be included in these rankings. Business services, legal services, social services, or other industries may well belong among the strongest growing, but industry coding changes and lack of data on the self-employed made it impossible to get comparable numbers. Of the 42 comparable industries, the fastest-growing, by far, were security/commodity brokers & investment offices and transportation services (Figure 2). Manufacturing comprises six of the 10 fastest-growing industries on the list.

Health services, the 11th-fastest growing industry, added the most jobs (45,278), followed by eating and drinking establishments with 26,043 jobs. Printing and publishing, education, trucking/water/air transportation, insurance, and miscellaneous retail each added over 10,000 jobs. Air transportation was responsible for most of the growth in trucking/water/air transportation.

**Declining Industries:** There were declines in some industries because of international competition, changing preferences, and technology/productivity gains. The fastest declines were in mining, apparel, textile mill products, and leather products (Figure 2). Next on the list of declining industries were five durable goods manufacturing industries. The industrial machinery losses were in computer manufacturing as well as other kinds of industrial machinery.

**Declining Occupations:** Many declining occupations reflect industry employment declines. Gains in productivity from technological advances as well as international competition contributed to the need for fewer workers in many of these occupations. Five of the six fastest-declining occupations were expected to decline (Figure 3). Electrical and industrial

**Some points for better understanding this data:** The Census numbers for industry and occupational groups are based on the approximately one in six sample of households that responded to the Census long forms. The Census numbers are based on the listed people's current jobs at the time the Census forms were filled out (Figure 1).

For the more detailed occupational clusters, the data is from 1-in-20 microdata samples from the Censuses (Figure 3).

Finally, the detailed industry data is based on all jobs covered by unemployment insurance, on an annual average basis. This does not include the self-employed or most jobs in agriculture, however, and industry coding changes rendered some of the industries (such as business services and most other service industries) incomparable between 1980 and 1990. In Figure 2, government workers in agencies which perform functions similar to private employers are included in those industries, like health and education.

Figure 2

## Some Fast Growing and Declining Industries Minnesota, 1980 to 1990

| Industry | Actual: Employment 1980 | Actual: Employment 1990 | Actual: 1980 - 1990 Numeric Change | Actual: 1980 - 1990 Percent Change | Projected: 1980 - 1990 Numeric Change | Projected: 1980 - 1990 Percent Change | Difference: Percentage Point Difference |
|---|---|---|---|---|---|---|---|
| **Fastest Growing:**** | | | | | | | |
| Security/Commodity Brokers & Holding/Investment Offices | 5,985 | 14,536 | 8,551 | 143 % | 2,480 | 38 % | 105 |
| Transportation Services | 2,784 | 6,420 | 3,636 | 131 | 800 | 27 | 104 |
| Printing and Publishing | 33,586 | 51,921 | 18,335 | 55 | 6,700 | 19 | 36 |
| Transportation Equipment | 7,878 | 11,342 | 3,464 | 44 | -1,370 | -17 | 61 |
| Lumber and Wood Products | 11,866 | 16,955 | 5,089 | 43 | 1,970 | 15 | 28 |
| Furniture and Fixtures | 3,853 | 5,487 | 1,634 | 42 | 630 | 16 | 27 |
| Rubber and Miscellaneous Plastics Products | 10,725 | 15,045 | 4,320 | 40 | 1,020 | 9 | 31 |
| Insurance Carriers, Agents, Brokers, and Services | 33,242 | 45,284 | 12,042 | 36 | 5,540 | 15 | 22 |
| Chemicals and Allied Products | 7,440 | 9,898 | 2,458 | 33 | 1,200 | 16 | 17 |
| Trucking, Warehousing, Water, and Air Transportation | 38,535 | 50,611 | 12,076 | 31 | 5,400 | 12 | 19 |
| **Fastest Declining:**** | | | | | | | |
| Metal Mining | 13,818 | 6,317 | -7,501 | -54 % | -5,970 | -43 % | -11 |
| Apparel and Other Textile Products | 5,785 | 3,017 | -2,768 | -48 | -2,680 | -42 | -6 |
| Textile Mill Products | 3,109 | 1,897 | -1,212 | -39 | -830 | -26 | -13 |
| Leather and Leather Products | 2,311 | 1,978 | -333 | -14 | -100 | -4 | -10 |
| Industrial Machinery | 87,472 | 75,992 | -11,480 | -13 | 11,540 | 13 | -26 |
| Miscellaneous Manufacturing Industries | 7,283 | 6,387 | -896 | -12 | -400 | -5 | -7 |
| Fabricated Metal Products | 37,567 | 34,512 | -3,055 | -8 | 2,320 | 6 | -14 |
| Stone, Clay, and Glass Products | 9,197 | 8,606 | -591 | -6 | 1,210 | 13 | -19 |
| Primary Metal Industries | 6,745 | 6,324 | -421 | -6 | -220 | -3 | -3 |
| Building Materials and Garden Supplies | 18,807 | 17,812 | -995 | -5 | 2,970 | 14 | -19 |

**Of 42 industries with comparable employment in 1980 and 1990. The other 24 industries were left out of the rankings either because the data source is not representative of all employment, like agriculture and other industries with many self-employed, or because of industry coding changes, like most service industries.

Sources: Actual data from ES-202 Covered Employment Data, Minnesota Department of Jobs & Training; projected data from Minnesota Department of Jobs & Training's Minnesota Employment Outlook to 1990

machinery repairer jobs declined thanks to a decline in durable goods manufacturing and a larger-than-expected drop in phone and phone line installers. A major reason for the decline in private household services was the dwindling number of people wanting or available to work individually as private household workers. There are now companies providing cleaning and child care services, and the number of non-private child care workers grew tremendously. Secretaries/ stenographers/typists, a category where strong growth was expected, declined by 3,000 jobs instead.

**Growth Occupations:** Every managerial, professional, technician, and sales cluster gained jobs. A wide variety of occupations are on the fastest-growing list (Figure 3). Adjusters/investigators/bill collectors led the pack with 157 percent growth. The second-fastest growing group was sales supervisors/ proprietors, and the third was math/computer science professionals (particularly systems analysts and those in operations research). The agriculture-related cluster, with its largest occupations being groundskeepers and animal caretakers, grew sixth-fastest. This is especially significant because of the fallacy that all agricultural employment is declining. Two strong-growing occupations in the miscellaneous technician category were computer programmers and legal assistants.

Electrical and electronic equipment assemblers made up the bulk of the growth of the seventh-ranked miscellaneous precision workers cluster. Assemblers were projected to grow fast, but this fast growth seems surprising now because the occupation has faced decline due to automation, global competition, and companies moving assembly functions to places where

Figure 3

## Strong Growing and Declining Occupational Clusters* Minnesota, 1980 to 1990

| Occupational Cluster | Percent Change | | Occupational Cluster | Numeric Change | |
|---|---|---|---|---|---|
| | Actual | Projected | | Actual | Projected |
| **Fastest Growing:** | | | **Adding Most Jobs:** | | |
| Adjusters and Investigators | 157 % | 21 % | Sales Supervisors, Proprietors | 35,532 | 6,953 |
| Sales Supervisors, Proprietors | 141 | 25 | Management-Related | 28,841 | 6,679 |
| Math, Computer Science Professionals | 131 | 23 | Managerial and Administrative | 23,410 | 43,813 |
| Social Scientists | 93 | 33 | Personal Services | 16,091 | 9,924 |
| Information Clerks | 76 | 15 | Sales Workers-Retail & Personal Services | 15,111 | 23,512 |
| Agricultural-Related | 73 | 12 | Adjusters and Investigators | 14,600 | 1,997 |
| Miscellaneous Precision Workers | 69 | 29 | Writers, Artists, Entertainers, Athletes | 14,131 | 3,684 |
| Technicians, exc Health, Engrng, Science | 66 | 24 | Information Clerks | 13,525 | 3,092 |
| Writers, Artists, Entertainers, Athletes | 61 | 14 | Technicians, exc Health, Engrng, Science | 13,243 | 4,762 |
| Management-Related | 56 | 12 | Health Assessment, Treatment | 12,371 | 972 |
| Guards | 49 | 18 | Sales Reps-Commodities except Retail | 9,815 | 6,287 |
| Teachers, Postsecondary | 49 | -15 | Math, Computer Science Professionals | 8,589 | 1,326 |
| Natural Scientists | 48 | 12 | Material Recording,Sched,Distrib Clerks | 8,299 | 5,058 |
| Printing Machine Operators | 46 | 11 | Sales Reps-Finance & Business Services | 8,084 | 9,824 |
| Computer Equipment Operators | 43 | 5 | Engineers, Architects, Surveyors | 6,624 | 3,448 |
| **Fastest Declining:** | | | **Losing Most Jobs:** | | |
| Extractive/Mining Occupations | -42 % | -43 % | Farm Operators and Managers | -21,713 | -9,342 |
| Farm Workers, except Managerial | -41 | -12 | Farm Workers, except Managerial | -10,852 | -3,554 |
| Metal and Plastic Machine Operators | -37 | 3 | Metal and Plastic Machine Operators | -5,916 | 409 |
| Rail Transportation Occupations | -36 | -9 | Miscellaneous Machine Operators | -5,761 | -139 |
| Communications Equipment Operators | -30 | -12 | Supervisors-Precision Production | -5,025 | 1,968 |
| Farm Operators and Managers | -29 | -11 | Financial Records Processing | -3,319 | 2,087 |
| Private Household Occupations | -22 | 16 | Secretaries, Stenographers, Typists | -3,029 | 26,049 |
| Industrial Machinery Repairers | -21 | 25 | Records Processing Clerks, exc Financial | -2,130 | 3,346 |
| Supervisors-Precision Production | -19 | 7 | Construction Trades | -2,045 | -3,590 |
| Electrical, Electronic Equip. Repairers | -14 | 15 | Electrical, Electronic Equip. Repairers | -1,673 | 1,881 |

*Of 71 occupational clusters. Seven other clusters were left out of the rankings because of 1980 employment less than 2,000.

Sources: Actual data from 1980 and 1990 Censuses; projected data from Minnesota Department of Jobs & Training's Minnesota Employment Outlook to 1990

labor is cheaper. Some differences occurred in how technology jobs were coded, which might mean that some of these 1990 jobs might have been categorized as different jobs in 1980 and thus the growth may not be as great as it looks.

Surprisingly, no health clusters are among the 15 fastest-growing. However, some specific health occupations (like therapist jobs), appear to have grown faster than their overall clusters.

Both managerial clusters and the four sales clusters are among those adding the most jobs. Child care workers (non-private) made up the largest portion of the gain in personal services workers, and designers added the most jobs among writers/artists/entertainers/athletes. Health assessment and treatment is tenth on this list, with registered nurses adding most of these jobs--they were projected not to grow much at all.

**In summary**, major employment trends of the 1980s that become evident from this data are the fast and large growth in service industries, the fast growth in finance/insurance/real estate, the decline in farming and mining employment, the switch from employment growth to decline in durable goods manufacturing, and the fast growth for sales, technical, professional and managerial jobs.

Much of what occurred was anticipated to some degree. Although the majority of strong-growing and declining occupations grew more or declined more than projected, this may partially reflect a conservativeness in making projections rather than being total surprises. Yet employment changes in some industries and occupations were much different than expected, mainly because of shifting demands, globalization, and automation.

*By Sue Borgfelt*

# Research Summaries

## *Get to Know Minnesota*

**A Portrait of Minnesota's Legislative Districts . . .**

The *District Data Book* gives us a broad-brushed picture of Minnesota and its legislative districts. 1990 census snapshots display data about age, race, gender, education, family structure, income, poverty and housing for each of Minnesota's 201 legislative districts. Tables and maps, compiled by the State Demographer's Office of Minnesota Planning, have been focused to allow for clear comparisons of House and Senate districts.

In addition to the district detail, statewide information is topically captured to shed more light on the broader changes and trends which have occurred over the 10-year census period.

Here are some of the book's highlights:

- Minnesota's per capita income nearly doubled in ten years, from $7,451 in 1979 to $14,389 in 1989.
- In District 50A, which includes the city of Anoka, 24.3 percent of the population is of school age (6 to 17 years). This is the highest proportion in the state.
- The district with the largest proportion of people age 65 and older is District 13B in western Minnesota (with 22.5 percent).
- At $30,876, District 42A, including Edina, has the highest per capita income. District 2B in northeastern Minnesota has the lowest with a per capita income of $7,727.
- The poverty rate is greatest in District 61A (within Minneapolis) with 42.9 percent of its population in poverty. District 43A, that includes Chanhassen, has the lowest poverty rate, 1.9 percent.
- District 58B in Minneapolis has the highest unemployment rate with 15.7 percent unemployed.
- More than 40 percent of housing in Minnesota was built over the past two decades.
- District 64A in St. Paul has the greatest proportion of people with graduate or professional degrees. In this district, 22.1 percent of people over age 25 have advanced degrees.
- During the last decade, Minnesota's population grew 7.3 percent from 4,075,970 in 1980 to 4,375,099 in 1990.

Figure 1

**Districts With the Highest Percentage of Minorities**

| | | | | | |
|---|---|---|---|---|---|
| 1. | 58B | 63.9% | 6. | 66A | 22.1% |
| 2. | 65A | 52.0% | 7. | 02B | 21.2% |
| 3. | 61B | 49.9% | 8. | 59B | 17.3% |
| 4. | 61A | 46.1% | 9. | 67A | 16.8% |
| 5. | 65B | 28.6% | 10. | 58A | 16.0% |

Get to know the people of Minnesota and its 201 districts. Learn about Minnesotans - who they are, where they live, what kind of families they have and what occupation they represent. This book is a resource for anyone - legislators, state and local government, special interest groups and interested citizens - needing a portrait of legislative districts.

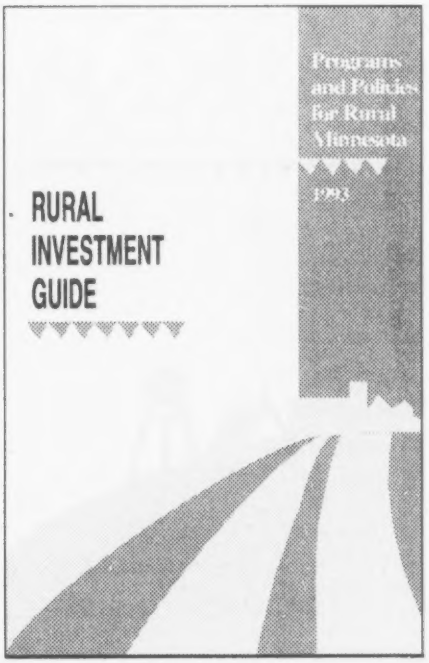
Copies are available from:

Minnesota's Bookstore
117 University Avenue
St. Paul, MN 55155

612-297-3000 or
1-800-657-3757.

## For More of a Regional Perspective . . .

The *Rural Investment Guide*, produced under the direction of the Regional Development Board, frames Minnesota's rural landscape within regional borders. *The Guide* was established by the Rural and Economic Development Act of 1987 to assist decision-makers in the allocation of resources and the development of appropriate policies for rural Minnesota. In this edition we find a rich compendium of tables and maps, complemented by local narratives about each of Minnesota's six rural regions.




Format changes for 1993 include:

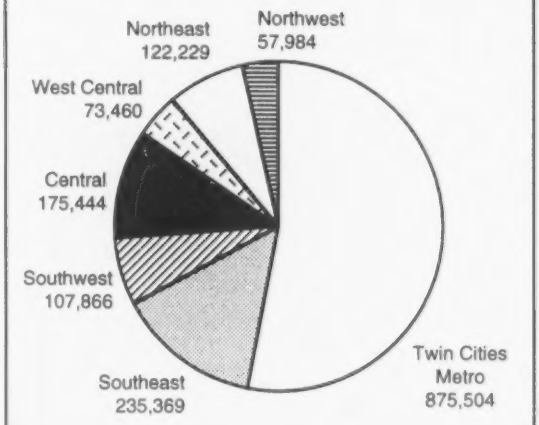
- This fourth edition builds upon past issues and user feedback to illustrate Minnesota's regions. It contains several new features, and substantial revisions in parts of earlier editions that should make the *Guide* more accessible to its readers.

- The state's "Economic Blueprint" is summarized, laying out specific and measurable goals for the economy through 2000.

- Several distinguished contributors share their views on emerging rural economic and demographic trends, and offer some advice for policy makers.

Figure 2

**Share of Households by Region**
**Minnesota, 1990**




- Data on age and gender, poverty, household income, agriculture migration, and housing are charted and graphed to allow for easy comparison between state, region and county.

- The "Regional Profiles" contain narratives written by area residents that add a distinctly local flavor.

- A revised set of regional infrastructure maps depict the capacity or usage-levels of the region's infrastructures, where that is possible.

- "State Initiatives" available for rural development have been updated to reflect results of the 1992 Legislative Session and other administrative changes.

To order the *Rural Investment Guide*, contact:

The Rural Development Board
Minnesota Department of
Trade and Economic Development
500 Metro Square
121 7th Place East
St. Paul, Minnesota 55101-2146

*By Carole Fuller*

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**Send us your suggestions and comments!**

A message from Commissioner R. Jane Brown

By the time this issue of *Minnesota Labor Market Trends* arrives, you should have received a letter from us asking whether or not you want to continue getting this publication (as well as other publications from the Research and Statistics Office).

We are cleaning up our mailing lists to eliminate duplicates and to assure that our materials go to those who want them. **If we do not receive your response, you will no longer get this report.** For your convenience, a stamped return envelope was enclosed with the letter.

The back side of the letter is a survey that asks several questions about our publications. We strive to continually improve our materials in order to better serve you, our customer, and appreciate your timely response.

We are particularly interested in how often you use each report, how we can improve it and those portions you consider most important.

If you haven't seen the letter, please give the Research and Statistics Office a call at (612) 296-6545. We value your input and wouldn't want you to miss an issue.

Sincerely,

R. Jane Brown
Commissioner

The *Minnesota Labor Market Trends* is published quarterly by the Research and Statistics Office of the Minnesota Department of Jobs and Training.

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